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EXAMINER	
KIM, DAVID S	

ART UNIT	PAPER NUMBER
2633	

DATE MAILED: 04/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/750,311	ARECCO ET AL.	
	Examiner	Art Unit	
	David S. Kim	2633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 December 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *36-46* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *36-46* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Application No. 09/608,657 as a primary reference:

2. **Claims 36-46** are provisionally rejected under 35 U.S.C. 102(e) as being anticipated by copending Application No. 09/608,657 which has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the copending application, it would constitute prior art under 35 U.S.C. 102(e), if published under 35 U.S.C. 122(b) or patented. This provisional rejection under 35 U.S.C. 102(e) is based upon a presumption of future publication or patenting of the copending application.

Regarding claim 36, Application No. 09/608,657 discloses:

An apparatus, comprising:

a first ring network (outer ring in Fig. 2) having a first optical carrier; and

a second ring network (inner ring in Fig. 2) having a second optical carrier, wherein the first optical carrier is operable to transmit one or more signals in a first direction (counterclockwise) and the second optical carrier is operable to transmit one or more signals in a second direction (clockwise) that is opposite to the first direction, and wherein the first and

second ring networks implement a wavelength division multiplexing protocol (p. 16, last paragraph, note wavelength bands λ1...N in Fig. 2), the first and second ring networks including:

a pair of nodes that comprise a first (node 20c in Fig. 2) and a second node (node 20f in Fig. 2), the pair being coupled along the first and second optical carriers and being operable to manage a subset of wavelengths within a set of transmission wavelengths, the set of transmission wavelengths (λ1...N) including more than one transmission wavelength such that one of the transmission wavelengths can be switched (λx, λy in Fig. 3) while other transmission wavelengths in the set are not switched (bypass wavelengths in OADM 4-5 in Fig. 3), a selected one (e.g., λy) of the set of transmission wavelengths may be reserved on the first optical carrier (e.g., ring 2) during normal operative conditions and during a failure (Fig. 9) the selected wavelength is implemented on the first optical carrier, wherein the first and second nodes are further operable to communicate with each other and to communicate along a working path under normal operative conditions (Fig. 2), the first and second nodes being further operable to communicate with each other along a protection path during a failure (Fig. 9) within a selected one of the first and second ring networks such that one or more optical signals are rerouted along the protection path (path between nodes 20c and 20f in Fig. 9) during the failure, and wherein a response to a failure condition is executed on a channel level (original disclosure, p. 7, l. 4-5, p. 8, 1st full paragraph – p. 9, 1st full paragraph), the first and second ring networks being coupled to an optical switch unit (optical switch unit 15 in figures) that includes a number of switching blocks that is twice a number of protected channels (i.e. four switches 22-25 for two channels).

Regarding claim 37, Application No. 09/608,657 discloses:

The apparatus of Claim 36, wherein the first and second ring networks are operable to propagate one or more optical signals in one or more transmission channels (note wavelength

bands λ1...N) included therein, the one or more transmission channels being defined by a set of wavelengths having a predetermined wavelength transmission band.

Regarding claim 38, Application No. 09/608,657 discloses:

The apparatus of Claim 36, wherein the pair of nodes are operable to communicate optical data at first (λx) and second wavelengths (λy).

Regarding claim 39, Application No. 09/608,657 discloses:

The apparatus of Claim 38, wherein the working path utilizes the first wavelength (λx) for optical data propagation on the first ring network (outer ring in Fig. 2) and the second wavelength (λy) for optical data propagation on the second ring network (inner ring in Fig. 2).

Regarding claim 40, Application No. 09/608,657 discloses:

The apparatus of Claim 39, wherein the first wavelength is not used during a selected time interval (note that the inner ring in Fig. 2 lacks a λx signal, but only when operating without a failure as shown in Fig. 9) on the second ring network for optical data propagation and the second wavelength is not used during a selected time interval (note that the outer ring in Fig. 2 lacks a λy signal, but only when operating without a failure as shown in Fig. 9) on the first ring network for optical data propagation.

Regarding claim 41, Application No. 09/608,657 discloses:

The apparatus of Claim 39, wherein the pair of nodes are operable to communicate optical data at a pair of generic wavelengths (λx and λy) that define a logical ring (p. 18) that may include the working path that utilizes the first wavelength on the first ring network and the second wavelength on the second ring network.

Regarding claim 42, Application No. 09/608,657 discloses:

The apparatus of Claim 38, wherein the protection path utilizes the first and second wavelengths (note λx and λy on the path between nodes 20c and 20f in Fig. 9) to communicate optical data.

Regarding claim 43, Application No. 09/608,657 discloses:

The apparatus of Claim 36, wherein the first and second nodes are operable to perform add/drop/bypass operations (note OADMs of Fig. 3 in nodes of Fig. 2, p. 19) for one or more optical signals propagating along a selected one of the first and second ring networks.

Regarding claim 44, Application No. 09/608,657 discloses:

The apparatus of Claim 36, wherein the first and second nodes are operable to perform an amplification operation (amplifiers on p. 20, last paragraph and p. 21, last paragraph and p. 27, last paragraph and p. 31, last paragraph) for one or more optical signals propagating along a selected one of the first and second ring networks.

Regarding claim 45, Application No. 09/608,657 discloses:

The apparatus of Claim 36, wherein the first and second nodes are operable to perform a regeneration (p. 19, last full paragraph) operation for one or more optical signals propagating along a selected one of the first and second ring networks.

Regarding claim 46, Application No. 09/608,657 discloses:

The apparatus of Claim 36, wherein the first (outer ring in Fig. 2) and second ring (inner ring in Fig. 2) networks define an optical transmission system that includes inner and outer ring networks that are operable to facilitate propagation of optical data in opposite directions (counterclockwise and clockwise in Fig. 2).

This provisional rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the copending application was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131. This rejection may not be overcome by the filing of a terminal disclaimer. See *In re Bartfeld*, 925 F.2d 1450, 17 USPQ2d 1885 (Fed. Cir. 1991).

Shiragaki et al. as a primary reference:

3. **Claims 36-43 and 46** are rejected under 35 U.S.C. 102(a) as being anticipated by Shiragaki et al. (European Patent Application EP 0 920 153 A2, hereafter "Shiragaki").

Regarding claim 36, Shiragaki discloses:

An apparatus, comprising:

a first ring network (working ring 101 in Fig. 9) having a first optical carrier; and

a second ring network (protection ring 102 in Fig. 9) having a second optical carrier, wherein the first optical carrier is operable to transmit one or more signals in a first direction (clockwise) and the second optical carrier is operable to transmit one or more signals in a second direction (counterclockwise) that is opposite to the first direction, and wherein the first and second ring networks implement a wavelength division multiplexing protocol (note multiple wavelengths that are multiplexed and demultiplexed in Fig. 9, col. 15, l. 29-30), the first and second ring networks including:

a pair of nodes that comprise a first (e.g., node A in Fig. 8) and a second node (e.g., node B), the pair being coupled along the first and second optical carriers and being operable to manage a subset of wavelengths within a set of transmission wavelengths, the set of transmission wavelengths ($\lambda 1$-$\lambda 4$) including more than one transmission wavelength such that one of the transmission wavelengths can be switched (e.g., $\lambda 1$, $\lambda 3$ in Fig. 8) while other transmission wavelengths in the set are not switched (e.g., $\lambda 2$, $\lambda 4$ in Fig. 8), a selected one (e.g., $\lambda 3$ in Fig. 10) of the set of transmission wavelengths may be reserved on the first optical carrier (e.g., working ring 101 in Fig. 10) during normal operative conditions and during a failure (Fig. 10) the selected wavelength is implemented on the first optical carrier, wherein the first and second nodes are further operable to communicate with each other and to communicate along a working path under normal operative conditions (Fig. 8), the first and second nodes being further

operable to communicate with each other along a protection path during a failure (Fig. 10) within a selected one of the first and second ring networks such that one or more optical signals are rerouted along the protection path (protection paths between nodes A and B in Fig. 8) during the failure, and wherein a response to a failure condition is executed on a channel level (note that protection switch 611 operates individually on one channel λ1 in Fig. 9), the first and second ring networks being coupled to an optical switch unit (various switches contained in each node in figures) that includes a number of switching blocks that is twice a number of protected channels (e.g., any four switching blocks in Fig. 9, two protected channels λ1-λ2 in Fig. 9).

Regarding claim 37, Shiragaki discloses:

The apparatus of Claim 36, wherein the first and second ring networks are operable to propagate one or more optical signals in one or more transmission channels (λ1-λ4 in Figs. 8-10) included therein, the one or more transmission channels being defined by a set of wavelengths having a predetermined wavelength transmission band.

Regarding claim 38, Shiragaki discloses:

The apparatus of Claim 36, wherein the pair of nodes are operable to communicate optical data at first (e.g., λ1 in Fig. 8) and second wavelengths (e.g., λ3).

Regarding claim 39, Shiragaki discloses:

The apparatus of Claim 38, wherein the working path utilizes the first wavelength (λ1) for optical data propagation on the first ring network (ring 101 in Fig. 8) and the second wavelength (λ3) for optical data propagation on the second ring network (ring 102 in Fig. 8).

Regarding claim 40, Shiragaki discloses:

The apparatus of Claim 39, wherein the first wavelength is not used during a selected time interval (note that ring 102 in Fig. 8 lacks a λ1 signal, but only when operating without a failure as shown in Fig. 8) on the second ring network for optical data propagation and the

second wavelength is not used during a selected time interval (note that ring 101 in Fig. 8 lacks a λ3 signal, but only when operating without a failure as shown in Fig. 8) on the first ring network for optical data propagation.

Regarding claim 41, Shiragaki discloses:

The apparatus of Claim 39, wherein the pair of nodes are operable to communicate optical data at a pair of generic wavelengths (e.g., λ1 and λ3) that define a logical ring that may include the working path that utilizes the first wavelength on the first ring network and the second wavelength on the second ring network.

Regarding claim 42, Shiragaki discloses:

The apparatus of Claim 38, wherein the protection path utilizes the first and second wavelengths (note λ1 and λ3 on the protection paths between nodes A and B in Fig. 8) to communicate optical data.

Regarding claim 43, Shiragaki discloses:

The apparatus of Claim 36, wherein the first and second nodes are operable to perform add/drop/bypass operations (note ADMs 610 of Fig. 9) for one or more optical signals propagating along a selected one of the first and second ring networks.

Regarding claim 46, Shiragaki discloses:

The apparatus of Claim 36, wherein the first (ring 101 in Figures) and second ring (ring 102 in Figures) networks define an optical transmission system that includes inner and outer ring networks that are operable to facilitate propagation of optical data in opposite directions (e.g., clockwise and counterclockwise in Fig. 1).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

> invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. **Claim 44** is rejected under 35 U.S.C. 103(a) as being unpatentable over Shiragaki as applied to the claims above, and further in view of Cadeddu et al. (U.S. Patent No. 5,647,035, hereinafter "Cadeddu").

Regarding claim 44, Shiragaki does not expressly disclose:

The apparatus of Claim 36, wherein the first and second nodes are operable to perform an amplification operation for one or more optical signals propagating along a selected one of the first and second ring networks.

However, it is well known and common for nodes to perform an amplification operation. Cadeddu discusses nodes that perform such an operation (Cadeddu, col. 9, lines 59-64). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to incorporate an amplification operation in the first and second nodes of Shiragaki. One of ordinary skill in the art would have been motivated to do this to recover any signal losses that can occur because of passage through the nodes and the carriers (Cadeddu, col. 9, lines 61-64).

7. **Claim 45** is rejected under 35 U.S.C. 103(a) as being unpatentable over Shiragaki as applied to the claims above, and further in view of Ramaswami et al. (*Optical Networks: A Practical Perspective*, hereinafter "Ramaswami").

Regarding claim 45, Shiragaki does not expressly disclose:

The apparatus of Claim 36, wherein the first and second nodes are operable to perform a regeneration operation for one or more optical signals propagating along a selected one of the first and second ring networks.

However, it is well known and common for nodes to perform a regeneration operation. Moreover, it is well known that regeneration operations are applicable to propagating signals at almost any point along their respective propagation paths, including within nodes of ring networks. Ramaswami discusses standard regeneration operations. (Ramaswami, p. 10-11). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to incorporate a regeneration operation in the nodes of Shiragaki. One of ordinary skill in the art would have been motivated to do this since there are transmission situations where an optical signal "may not be able to remain in optical form all the way to its destination and may have to be regenerated in between" (Ramaswami, p. 10, last paragraph).

Double Patenting

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. **Claims 36-39, 41-44, and 46** are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 2 of copending Application No. 09/608,657 in view of Cadeddu.

Regarding claim 36, consider claim 2 of the copending application.

Claim no. in instant application	Limitation in the claim of the instant application	Claim no. in copending application	Corresponding limitation in the claim of the copending application
36	1st optical carrier	2	1st optical carrier
	2nd optical carrier		2nd optical carrier
	WDM protocol		Usage of multiple wavelengths on each carrier
	Pair of nodes		Nodes communicating in pairs
	Subset and set of wavelengths		Subset and set of wavelengths
	the set of transmission wavelengths including more than one transmission wavelength such that one of the transmission wavelengths can be switched while other transmission wavelengths in the set are not switched, a selected one of the set of transmission wavelengths may be reserved on the first optical carrier during normal operative conditions and during a failure the selected wavelength is implemented on the first optical carrier		exchange optical signals (i.e., switching wavelength usage and arrangement along the carriers), bypass remaining wavelengths, exchange optical signals using...the second wavelength on the first optical carrier during a failure condition (implies that the second wavelength is reserved on the first optical carrier during normal operative conditions)
	Working path		Working link
	Normal operative conditions		Normal condition
	Failure		Failure condition
	Protection path		1st wavelength on the 2nd optical carrier and the 2nd wavelength on the 1st optical carrier

Claim 2 of the copending application does not expressly disclose:

A first ring network having the first optical carrier; and

a second ring network having the second optical carrier.

However, ring networks are extremely common and well known in the art. Cadeddu discloses ring networks. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to arrange the first optical carrier and the second optical carrier of claim 2 of the copending application in ring architectures. One of ordinary skill in the

art would have been motivated to do this since such an "architecture allows providing protection against line and device failures and against degradation in transmission performance (Cadeddu, col. 1, lines 48-50).

Regarding claims 37-39 and 41-43, consider claim 2 of the copending application in view of Cadeddu.

Claim no. in instant application	Limitation in the claim of the instant application	Claim no. in copending application	Corresponding limitation in the claim of the copending application
37	Set of wavelengths having a predetermined wavelength transmission band	2	Predetermined subset of wavelengths in a set of transmission wavelengths
38	Communicate data at 1st and 2nd wavelengths	2	Communicating in pairs, 1st and 2nd wavelengths
39	1st wavelength on 1st ring network, 2nd wavelength on 2nd ring network	2	1st wavelength on 1st carrier in ring architecture of Cadeddu, 2nd wavelength on 2nd carrier in ring architecture of Cadeddu
41	Pair of generic wavelengths, logical ring, 1st wavelength on 1st ring network, 2nd wavelength on 2nd ring network	2	1st and 2nd wavelengths, exchange of optical signals through 1st wavelength and 2nd wavelength, 1st wavelength on 1st carrier in ring architecture of Cadeddu, 2nd wavelength on 2nd carrier in ring architecture of Cadeddu
42	Protection path utilizes the 1st and 2nd wavelengths	2	1st wavelength on the 2nd optical carrier and the 2nd wavelength on the 1st optical carrier
43	Nodes are able to perform add/drop/bypass operations	2	Each of the nodes comprises optical add/drop multiplexers performing add, drop, bypass

Regarding claim 44, claim 2 of the copending application in view of Cadeddu does not expressly disclose the first and second nodes being operable to perform an amplification operation. However, it is well known and common for nodes to perform an amplification operation. Cadeddu discusses nodes that perform such an operation (Cadeddu, col. 9, lines 59-64). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to incorporate an amplification operation in the first and second nodes of claim 2 of the copending application. One of ordinary skill in the art would have been motivated to do

this to recover any signal losses that can occur because of passage through the nodes and the carriers (Cadeddu, col. 9, lines 61-64).

Regarding claim 46, claim 2 of the copending application in view of Cadeddu discloses the first and second ring networks that are operable to facilitate propagation of optical data in opposite directions. However, claim 2 of the copending application in view of Cadeddu does not expressly disclose that these two ring networks define an optical transmission system that includes inner and outer ring networks. Cadeddu discusses such a system that includes inner and outer ring networks (Cadeddu, Figs. 1-2). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to arrange the ring networks of claim 2 of the copending application in view of Cadeddu into a system that includes inner and outer ring networks, as taught in Cadeddu. One of ordinary skill in the art would have been motivated to do this since this system architecture provides various benefits, such as protection from failures, and protection means that maintain normal operating conditions of unaffected nodes (Cadeddu, col. 2, lines 8-17).

This is a provisional obviousness-type double patenting rejection.

10. **Claim 45** is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 2 of copending Application No. 09/608,657 in view of Cadeddu as applied to claim 36 above, and further in view of Ramaswami.

Regarding claim 45, claim 2 of the copending application in view of Cadeddu does not expressly disclose the first and second nodes being operable to perform a regeneration operation. However, it is well known and common for nodes to perform a regeneration operation. Ramaswami discusses standard regeneration operations. (Ramaswami, p. 10-11). Ramaswami teaches that regeneration operations comprise converting a signal from optical form to electrical form and back to optical form. Claim 2 of the copending application even

discloses the appropriate components to perform regeneration operations (optical transmitter and optical receiver in claim 2). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to expressly incorporate a regeneration operation in the nodes of claim 2 of the copending application in view of Cadeddu. One of ordinary skill in the art would have been motivated to do this since there are transmission situations where an optical signal "may not be able to remain in optical form all the way to its destination and may have to be regenerated in between" (Ramaswami, p. 10, last paragraph).

This is a provisional obviousness-type double patenting rejection.

Response to Arguments

11. Applicant's arguments filed on 13 December 2004 with respect to the rejection of claims 36-46 in view of the prior art of record have been fully considered but they are not persuasive. Applicant's arguments regarding these claims are based on limitations that were newly introduced to the claims by Applicant's amendment (13 December 2004):

- the set of transmission wavelengths including more than one transmission wavelength such that one of the transmission wavelengths can be switched while other transmission wavelengths in the set are not switched, a selected one of the set of transmission wavelengths may be reserved on the first optical carrier during normal operative conditions and during a failure the selected wavelength is implemented on the first optical carrier.

However, the standing rejections of these claims show in further detail how these claims are still not patentable in view of copending Application No. 09/608,657 and Shiragaki. Note the cited portions of copending Application No. 09/608,657 and Shiragaki above. Additionally, note the similarities between the "channel level" switching structures of Applicant's own invention (i.e., Fig. 3 of 09/750,311) and the switching structures of copending Application No. 09/608,657 (i.e., Fig. 3 of 09/608,657). Also, note the "channel level" switching structures of Shiragaki (i.e.,

the arrangement of protection switches 611-612 and 618-619, the two transmitters FROM NE, and the two receivers TO NE in Fig. 9 of Shiragaki)

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Arecco is cited to show related usage and placement of transponders and optical switches.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David S. Kim whose telephone number is 571-272-3033. The examiner can normally be reached on Mon.-Fri. 9 AM to 5 PM (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on 571-272-3022. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DSK

M. R. SEDIGHIAN
PRIMARY EXAMINER